IN THE CLAIMS:

85. (New) An optical system for detecting anomalies of a sample, comprising:

a source supplying a first beam at a first wavelength along a first path and a second beam at a second wavelength along a second path onto a surface of the sample, said two paths being at different incidence angles to the sample surface;

one or more detector(s) detecting radiation at the first and second wavelengths; and

an optical device receiving scattered radiation from the sample surface and originating from the first and second beams and focusing the scattered radiation to said detector(s), said device receiving radiation scattered by the sample surface irrespective of polarization state of such radiation, said device conveying the received scattered radiation to the detector(s) so that the detector(s) respond to radiation scattered by the sample surface irrespective of polarization state of such radiation.

86. (New) The system of claim 85, said optical device comprising a curved reflective surface and has an axis of symmetry substantially coaxial with the first path, defining an input aperture positioned proximate to the sample surface to receive scattered radiation therethrough from the sample surface.

87. (New) The system of claim 86, said curved surface comprising a paraboloidal or ellipsoidal mirrored surface.

88. (New) The system of claim 85, said first path being not more than about 10° angle from a normal direction to the sample surface.

89. (New) The system of claim 87, said first path being substantially normal to the sample surface.

90. (New) The system of claim 87, said second path being at an angle within a range of about 45 to 85 degrees to a normal direction to the sample surface.

91. (New) The system of claim 85, said first and second beams producing a first and a second illuminated spot on the sample surface, said first and second illuminated spots substantially coinciding.

92. (New) The system of claim 85, said source comprising a radiation source supplying a radiation beam and means for converting the radiation beam supplied by the source into said first and second beams.

93. (New) The system of claim 92, said converting means including a switch that causes the radiation beam from the source to be transmitted alternately along the two paths towards the sample surface.

94. (New) The system of claim 93, said system further comprising means for acquiring data from the detector at a data rate, said switch operating at a frequency of at least about three times that of the data rate.

95. (New) The system of claim 93, said system further comprising means for acquiring data from the detector at a data rate, said switch operating at a frequency of at least about five times that of the data rate.

96. (New) The system of claim 93, said switch including an electro-optic modulator or Bragg modulator.

97. (New) The system of claim 85, said system comprising a first detector detecting radiation of the first wavelength and a second detector for detecting radiation of the second wavelength.

98. (New) The system of claim 85, the sample having a smooth surface, wherein the second path is at an oblique angle to the sample surface, and the second beam is P or S polarized with respect to the sample surface.

99. (New) The system of claim 85, the sample having a rough surface, wherein the second path is at an oblique angle to the sample surface, and the second beam is S polarized with respect to the sample surface.

100. (New) The system of claim 85, further comprising means for comparing detected scattered radiation originating from the first beam and that originating from the second beam to distinguish between particles and COPs.

101. (New) An optical method for detecting anomalies of a sample, comprising:

directing onto a surface of the sample a first beam of radiation at a first wavelength along a first path and a second beam at a second wavelength along a second path, said two paths being at different incidence angles to the sample surface;

detecting radiation at the first and second wavelengths by means of one or more detectors; and

receiving scattered radiation from the sample surface and originating from the first and second beams and focusing the scattered radiation to said detector(s) such that radiation scattered by the sample surface irrespective of polarization state of such radiation is received and focused to the detector(s).

102. (New) The method of claim 101, said first path being not more than about 10° angle from a normal direction to the sample surface.

103. (New) The method of claim 101, said first path being substantially normal to the sample surface.

104. (New) The method of claim 101, said second path being at an angle within a range of about 45 to 85 degrees to a normal direction to the sample surface.

105. (New) The method of claim 101, said first and second beams producing a first and a second illuminated spot on the sample surface, said first and second illuminated spots substantially coinciding.

106. (New) The method of claim 101, said first and second beam directing comprising:

providing a source supplying a radiation beam; and

converting the radiation beam supplied by the source into said first and second beams.

107. (New) The method of claim 106, said source supplying radiation of a first and a second wavelength, wherein said detecting detects radiation of the first wavelength by means of a first detector and radiation of the second wavelength by means of a second detector.

108. (New) The method of claim 106, said converting including switching the radiation beam from the source alternately between the two paths towards the sample surface.

109. (New) The method of claim 108, said method further comprising acquiring data from the first detector at a data rate, wherein said switching is at a frequency of at least about three times that of the data rate.

110. (New) The method of claim 108, said method further comprising acquiring data from the first detector at a data rate, wherein said switching is at a frequency of at least about five times that of the data rate.

111. (New) The method of claim 108, the sample having a smooth surface, wherein the second path is at an oblique angle to the sample surface, and the directing directs a second beam that is S or P polarized with respect to the sample surface.

112. (New) The method of claim 111, the sample having a rough surface, wherein the second path is at an oblique angle to the sample surface, and the directing directs a second beam that is S polarized with respect to the sample surface.

113. (New) The method of claim 111, further comprising scanning sequentially the first and second beams across the same portion of the sample surface, wherein the first but not the second beam is directed to said surface while it is being scanned in a cycle, and the second but not the first beam is directed to said surface while it is being scanned in a subsequent cycle.

114. (New) The method of claim 101, further comprising comparing detected scattered radiation originating from the first beam and that originating from the second beam to distinguish between particles and COPs.